

## Patent Claims

1. A communication processor apparatus for communication in a network having
  - a processor device (10) for processing incoming signals and for production and/or provision of outgoing signals, and
  - a code memory device (11) for provision of a code for the processor device (10),characterized in that
  - the code memory device (11) is integrated in the processor device (10),
  - the code is in an encrypted form in the code memory device (11), and
  - the processor device (10) can be connected to an external decoder device (12) for decryption of at least a part of the code.
2. The communication processor apparatus as claimed in claim 1, in which the processor device (10) and the code memory device (11) are formed by a common integrated circuit.
3. The communication processor apparatus as claimed in claim 1 or 2, in which the common circuit is an ASIC.
4. The communication processor apparatus as claimed in one of the preceding claims, in which decryption information (INV) which can be made available to the decoding device (12) is also stored in the code memory device (11).
5. The communication processor apparatus as claimed in one of the preceding claims, in which the code memory device (11) has an input device for inputting an encrypted code.

6. The communication processor apparatus as claimed in one of the preceding claims, which has a interchanging device (24) for interchanging at least two digits in the multiple digit code for decryption.

7. An actuator sensor interface having a communication processor apparatus as claimed in one of the preceding claims.

8. A method for communication in a network, comprising the following steps:

- provision of a code and
- comparison of data with the code and/or transmission of the code into the network,  
characterized in that
- the code is provided in an encrypted form in a communication processor apparatus,
- at least a part of the encrypted code is decrypted outside the communication processor apparatus, and
- the decrypted code is made available to the communication processor apparatus.

9. The method as claimed in claim 8, in which decryption information (INV) is also stored together with the encrypted code in the communication processor apparatus, and is made available for decryption.

10. The method as claimed in claim 8 or 9, in which encrypted code is generated externally and is input to the communication processor apparatus.

11. The method as claimed in one of claims 8 to 10, in which the code is a multiple digit code and at least two digits are interchanged in the communication processor apparatus for decryption.

12. The method as claimed in one of claims 8 to 11, in which the communication takes place in an AS-i network.